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The tangential punch biopsy

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Abstract

Dermatologists around the world widely utilize skin biopsies, which can be performed using shave, punch, incisional, or excisional techniques [1]. The punch biopsy allows a dermatologist to obtain a full-thickness skin sample. The post-biopsy wound heals by primary closure or second intention [2]. Some suspicious lesions may be located at the body parts that are difficult to access.



Figure 1. The tangential punch biopsy of the orange peel.

Keywords: tangential punch biopsy, punch biopsy

We would like to introduce the tangential punch biopsy of the skin, the technique that has been initiated at our clinic and in use successfully for more than three years. It is an extended form of the existing punch biopsy modality. This technique can be used to excise small skin lesions, therein obtaining a sample with a smaller surface wound than a regular shave biopsy. The post-biopsy wound

is left to heal by secondary intention and hemostasis is achieved with a topical hemostatic agent. The tangential punch biopsy allows for biopsies at hard-to-reach areas, for example the concha of the ear. We are using a disposable punch instrument, which is tangentially inserted into the skin at an acute angle and rotated in an arc-like movement, creating semi-spherical defect at different depths (**Figures 1, 2**). It can also be pushed horizontally into the skin in the same fashion to obtain a larger sample. The depth of the required sample depends on the angle of insertion and the punch diameter. Another advantage of the tangential punch biopsy is the ability to evaluate deep layers of the skin by modifying the trajectory of the punch tool movement.

In all abovementioned techniques, appropriate documentation is essential. Prior to any biopsy, patients should be educated on the associated risks,

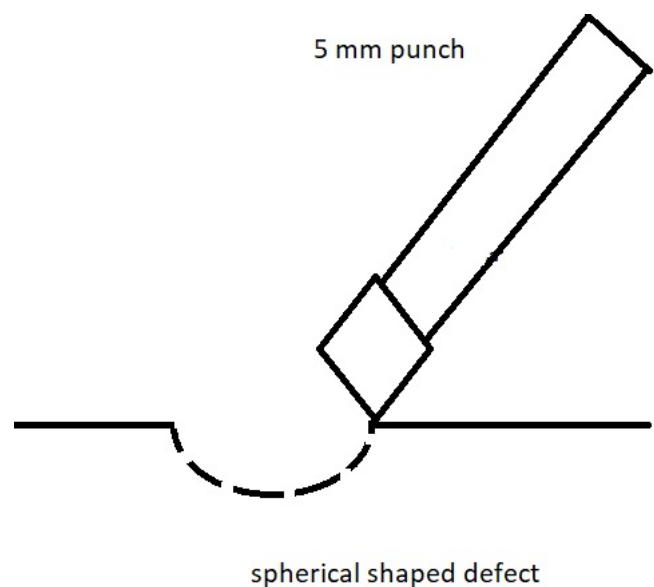


Figure 2. The tangential punch biopsy technique.

including bleeding, infection, and scarring, and patient consent should be obtained and documented in the medical record [3].

Potential conflicts of interest

The authors declare no conflicts of interests.

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